

Utah Weekly Pertussis Update

2019 data, through MMWR week ending March 9 (MMWR week 10)

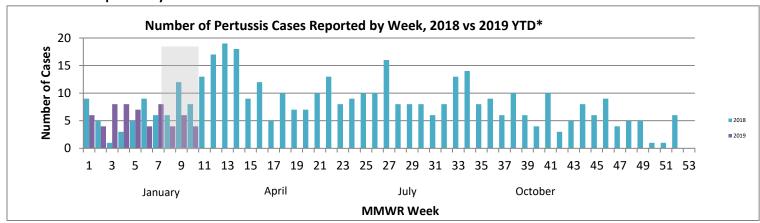
Data presented in this report are based on current data available and will be subject to change weekly.

Data Summary

| Total number of cases reported, 2019 year-to-date | | Utah Incidence rate, 2019 year-to-date (YTD) per 100,000 | |
|---|-----|--|------|
| (YTD) | 59 | person-years | 9.9 |
| | | | |
| Total number of cases reported 2018 | 428 | Utah Incidence rate, 2018 per 100,000 person-years | 14.6 |
| | | | |
| Number of cases reported in past week | 4 | National Incidence rate*, 2017 per 100,000 person-years. | 5.8 |
| Total number of cases reported, through same time | | | |
| period 2018 | 64 | 2019 Hospitalizations | 1 |
| | <1 | | |
| Age groups with the highest rates | 1-4 | 2019 Cases in infants <1 year | 4 |

^{*}National Incidence Rate is updated as released by the Centers for Disease Control and Prevention.

Number of cases reported by week



^{*}Additional cases may have occurred, especially in the most recent 3 weeks that have not yet been reported, as indicated by the grayed out section of the graph above.

2019 Year-to-Date Incidence Rates, By Age

| · · · · · · · · · · · · · · · · · · · | | | | | | |
|---------------------------------------|-------|------------|-------|--|--|--|
| | 2019 | 2017 | | | | |
| Age (years) | Cases | population | Rate* | | | |
| <1 | 4 | 51,401 | 40.6 | | | |
| 1-4 | 8 | 203,799 | 20.5 | | | |
| 5-14 | 16 | 521,331 | 16.0 | | | |
| 15-24 | 10 | 495,829 | 10.5 | | | |
| 25-34 | 6 | 457,423 | 6.8 | | | |
| 35-44 | 4 | 422,547 | 4.9 | | | |
| 45-54 | 6 | 317,532 | 9.9 | | | |
| 55-64 | 4 | 296,399 | 7.0 | | | |
| 65+ | 1 | 335,572 | 1.6 | | | |
| Unknown | 0 | - | - | | | |
| Total | 59 | 3,101,833 | 9.9 | | | |

^{*} Rate is calculated per 100,000 person years.

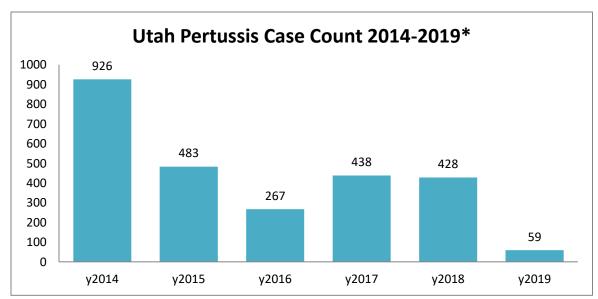
Infants less than 1 year of age have historically had the highest incidence rates of pertussis due to their susceptibility.

School Age Incidence Rates, 2019 Year-to-Date

| | Age | | 2017 | |
|--------------|---------|-------------------|------------|-------|
| Grade | (years) | 2019 Cases | Population | Rate* |
| Preschool | 3-4 | 3 | 102,181 | 15.3 |
| Kindergarten | 5 | 0 | 49,869 | 0.0 |
| 1 | 6 | 2 | 51,269 | 20.3 |
| 2 | 7 | 0 | 52,299 | 0.0 |
| 3 | 8 | 1 | 52,131 | 10.0 |
| 4 | 9 | 3 | 53,612 | 29.2 |
| 5 | 10 | 2 | 53,712 | 19.4 |
| 6 | 11 | 1 | 52,765 | 9.9 |
| 7 | 12 | 4 | 52,359 | 39.8 |
| 8 | 13 | 2 | 51,910 | 20.1 |
| 9 | 14 | 1 | 51,405 | 10.1 |
| 10 | 15 | 2 | 49,974 | 20.9 |
| 11 | 16 | 2 | 49,983 | 20.9 |
| 12 | 17 | 1 | 50,211 | 10.4 |

^{*} Rate is calculated per 100,000 person-years. School age incidence rates were calculated using the average age of a student in each grade. High incidence rates in 5th and 6th grade may be due to waining immunity.

Utah Case Counts of Pertussis, 2014-2019* Year to Date



Pertussis tends to be cyclical. Reports have increased in Utah since 2010, peaked in 2012, and are currently trending downward. 2019 data, through MMWR week ending January 5 (MMWR week 1)



Incidence of Pertussis by Local Health Department, 2019 YTD

| Local Health Department | 2019 Cases | Rate* |
|-------------------------|------------|-------|
| Bear River | 0 | 0.0 |
| Central Utah | 0 | 0.0 |
| Davis County | 1 | 1.5 |
| Salt Lake County | 23 | 10.6 |
| San Juan County | 0 | 0.0 |
| Southeast Utah | 0 | 0.0 |
| Southwest Utah | 9 | 19.9 |
| Summit County | 0 | 0.0 |
| Tooele County | 3 | 23.2 |
| TriCounty | 0 | 0.0 |
| Utah County | 11 | 9.5 |
| Wasatch County | 1 | 16.2 |
| Weber-Morgan | 11 | 21.8 |

^{* 2019} data includes pertussis cases reported year to date. 2014-2018 data reflects cases reported during the entire calendar year for each year.

